Patent

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REMARKS/ARGUMENTS

Claims 1-10 are currently pending in this application. By the present amendment, Claims 1, 2, and 8 have been amended. Claims 1-10 have been rejected under 35 U.S.C. 102 as anticipated by the Das U.S. Patent 4,435,803. The Applicant respectfully traverses these rejections. Reconsideration of the claims, as amended, is requested.

The Examiner alleges that Das teaches a method for reducing the power used by an integrated services hub supporting a plurality of telephone circuits, comprising offsetting ringing of each of the plurality of telephone circuits such that all the telephone circuits do not ring simultaneously.

The Das reference does not teach or suggest any equipment or method for reducing power. The problem discussed by Das relates to immediate ringing. Das described the prior art ringing cadence as a 2 second ringing period followed by 4 seconds of non-ringing. If a circuit was selected for ringing at the beginning of the non-ringing period, there could be a delay of 4 seconds before the telephones on the circuit start to ring. During this delay time, valuable telephone company resources were being wasted. Das solved the problem by providing 4 phases of ringing cadence, so that one phase is always in the ringing interval. In this way, a ringing interval is always active when a circuit is selected for ringing. However, the different intervals are not assigned to specific circuits. Instead, a selected circuit is assigned the next available ringing interval. On average, this reduces the delay between selection of a circuit and the start of ringing and provides a more efficient use of telephone company resources.

The Das system is not an integrated services hub. Instead, it is part of a conventional telephone company central office which provides POTS service to circuits which connect to customer premises. This is the type of service which is NOT used when an integrated services

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hub is placed on the customer's premises. The integrated services hub sends and receives signals to the central office over a DSL line connection. The integrated services hub provides the POTS equivalent signals to the telephone circuits on the customer's premises. It is true that an integrated services hub provides ringing current to a plurality of telephone circuits.

An integrated services hub according to the present invention can provide ringing current to all of the circuits to which it is connected at the same time, i.e. during the same ring cadence period. In contrast, Das provides ringing current to only a small portion of the circuits. In the example given by Das at Col. 7, lines 39-66, the ringing circuit supports 15 lines, but can ring only 4 of them during any given cadence interval. If four lines are ringing during a given cadence interval, and another one of the remaining eleven lines is selected for ringing, it is blocked until one of the ringing circuits goes off hook and releases the ringing circuit.

In the present invention, all circuits may be ringing in the same cadence. However, the circuits may not receive immediate ringing, which was the objective of Das. Each circuit is assigned a preselected starting delay in the ringing cadence so that the circuits will not be in the ringing intervals simultaneously. Thus, in the present invention there may be up to a four second delay in the start of ringing for each circuit, depending on precisely when a circuit is selected for ringing. However, since the integrated services hub handles the control of the telephone circuits, any delay does not waste telephone company resources.

An integrated services hub in a customer premises must be physically small enough to fit in a customer premises, must be able to operate with standard household power, and must be inexpensive. It does not have the power and other resources which are available at a telephone company central office. As noted above, Das does not even discuss power availability or the need to conserve power. That is because the system is in a central office. In contrast, it is very

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important in an integrated services hub to reduce power consumption and the size of equipment.

The power supply size also affects the cost of the equipment, which is very important to

individual users who install the equipment in their premises.

By the present amendment, Claims 1 and 8 have been amended to make it clear that the

invention is a system which can provide ring function to a plurality of telephone circuits during a

given ring cadence, but which offsets the ringing intervals within the cadence so that less than all

the circuits are ringing simultaneously. With these amendments, the Applicant submits that the

Claims 1 and 8 are patentable over the Das reference. Since the remaining Claims 2-7 and 9-10

depend from and further limit Claims 1 and 8, the applicant submits that these dependent claims

are also patentable. Allowance of Claims 1-10, as amended, is respectfully requested.

The Commissioner is hereby authorized to charge payment of any further fees associated

with any of the foregoing papers submitted herewith, or to credit any overpayment thereof, to

Deposit Account No. 21-0765, Sprint.

Applicants respectfully submit that the present application as amended is in condition for

allowance. If the Examiner has any questions or comments or otherwise feels it would be

helpful in expediting the application, he is encouraged to telephone the undersigned at (972) 731-

2288.

Respectfully submitted,

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